Environmental Course Catalog

April 1997

Comments and questions about the Environmental Course Catalog should be directed to **Dale Grenier**, **Ph.D.**, WSDOT Environmental Affairs Office, (360) 705-7478, or E-mail at **dgrenier@WSDOT.WA.GOV**

Your input is valued.



Memorandum

Date: November 1, 1996

From: Dale Grenier, Ph.D.

Phone: 360/705-7478 Subject: Environmental Course Catalog

To: WSDOT Employees

The Environmental Course Catalog was developed to assist in improving environmental training opportunities at WSDOT. It is one of several tools being utilized to help WSDOT meet its environmental responsibilities.

Section IX of this catalog contains a listing of environmental training courses that either have been taught at WSDOT in the past, or could be taught in the future. Training courses can be tailored to meet the specific needs of customers. (For instance some of the classes can be offered as mini-courses, less than one day in length.) Sections I-VIII, which precede the actual course listings, are a guide for using the catalog and also informs the reader how to actively assist in the development of classes.

The design of the Environmental Course Catalog was an inclusive process. Those who assisted in this process include staff from WSDOT Regional Environmental Offices, Modal Divisions, Environmental Affairs Office, and Staff Development. Now its up to you – the customer – to let us know what type of environmental training you need to "move it better".

If you have any questions about this catalog or environmental classes at WSDOT, please contact Dale Grenier at (360) 705-7478.

NOTE: Look for this Environmental Course Catalog and Class Announcements on the WSDOT Environmental Affairs Office Home Page: http://www.wsdot.wa.gov/eesc/environmental/default.htm When you reach the WSDOT EAO home page, select the "Training" button.

DG:bds Attachment

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Environmental Course Catalog

I. Introduction

Washington State Department of Transportation (WSDOT) staff have consistently voiced a need for more training regarding environmental subjects and issues that are necessary to their job function, responsibilities, and performance. The Olympia Service Center, Environmental Affairs Office (EAO), and Regional environmental staff are essential players in developing and implementing environmental training. Due to the increasing complexity and need for environmental knowledge, a more comprehensive approach to environmental training is needed. To begin addressing these needs, the *Environmental Course Catalog* was developed.

II. Description of Catalog

The Environmental Course Catalog contains an alphabetical listing of courses that can be taught to WSDOT staff as well as consultants and local government staff as appropriate. The course instructors include in-house WSDOT staff, consultants, and representatives from various resource agencies such as EPA, Ecology, and U.S. Army Corps of Engineers. They range in length from a one-hour training seminar to five-day training. The catalog is designed to be a flexible document, so that courses can be added, deleted, and/or modified to suit the needs of the customers.

This catalog is a supplemental tool to be used in conjunction with ATMS. It is a forum that can be utilized to have additional courses offered and/or designed. The catalog also identifies core courses that are offered on a regular schedule.

III. How to Use This Catalog

The catalog information is divided into broad environmental categories such as Water Quality, General Environmental, and Hazardous Waste. Classes within each environmental category are listed alphabetically and described. The following information is provided for each class:

Class Title/Description — A summary of the class content.

Recommended Audience — Those who are most likely to be interested or who will gain the most benefit and knowledge from attending.

Length — The length of the class.

ATMS Code — The course code that the class is listed under in the WSDOT office of Staff Development. (Some courses do not have such a code at this time because they are not yet offered through the WSDOT Staff Development Office.)

Instructors — WSDOT staff, resource agencies representatives, and/or consultants who teach the class.

Offered — Suggestions as to how frequently the class should be held in order to accommodate the needs of the customers.

Core Courses — These courses are an integral part of training. They are designated as high priority by WSDOT and its customers as necessary to train attendees in the most current regulatory requirements, standards, and technology. These classes are scheduled in advance, offered year in and year out, and will not be bumped for projects.

IV. How to Register for a Course

If You Are WSDOT Staff:

Some WSDOT staff have personal access to the ATMS system. If this is the case, you can register yourself for a course. If you do not have such access, you may register for the class by calling your Regional Training Coordinator. (See Part VIII for a list of Regional Training Coordinators.) If the regional Training Coordinator cannot get a student registered (if the ATMS system is "closed"), contact Carole Ransier in the WSDOT Staff Development Office in Olympia at (360) 705-7062.

If You Are a Consultant, Resource Agency Staff or Other non-WSDOT Staff:

Register through the Regional Training Coordinators, or Jim Sundahl in the Environmental Affairs Office in Olympia at (360) 705-7483.

V. Questions About Course Content or Problems Finding or Identifying a Course

If you have questions about course content and know how to contact the instructor, do so. If you do not know the instructor or how to contact them, call Dale Grenier in the Environmental Affairs Office in Olympia at (360) 705-7478.

If you have heard of an upcoming class, but are not sure of the precise name or ATMS code, contact Dale Grenier at (360) 705-7478.

VI. How to Propose the Development of a Class

If you want to propose that a certain class be given in the future, contact your Regional Environmental Manager or organizational training representative. They will determine the degree of need for the class in their respective regions/organization. If a need to present a class is established, they will then work with Dale Grenier (360) 705-7478 and Rico Baroga (360) 705-7491 at the OSC Environmental Affairs Office to get the class organized, placed into ATMS and advertised.

VII. Summary Matrix

The text instructions in the previous Parts V and VI are presented below in matrix form:

Summary Matrix How to Register for a Course and Other Questions About Course

How to Register for a Class	Contact
If you know the ATMS code andhave access	. Register on your own
If you know the ATMS code butdo not have access	. Regional Training Coordinator (See listing in part VIII)
If Regional Training Coordinator cannotaccess ATMS	. Carole Ransier (360) 705-7062
If you are not a WSDOT employee	. Carole Ransier (360) 705-7062
Questions About Course Content or	
Problems Finding or Identifying a Course	Contact
What is the course content?	
	. The instructor . Dale Grenier
What is the course content?	. The instructor . Dale Grenier (360) 705-7478 . Dale Grenier

VIII. Regional Environmental Managers and Training Coordinators

WSDOT Region	Regional Environmental Managers (will determine regional course needs)	Training Coordinator (will register people for classes on ATMS)
Eastern (Spokane)	Jim Prudente (509) 324-6131	Chris Damitio (509) 324-6084
Northwest (Seattle)	Kojo Fordjour (206) 440-4763	Kittie Tyler (206) 440-4068
North Central (Wenatchee)	Nancy Thompson (509) 663-9690	Jim Corrigan (509) 663-9605
Olympic (Tumwater)	Ken Stone (360) 357-2660	Bob Otis (360) 357-2613
Southwest (Vancouver)	Steve Zaske (360) 905-2173	Gene Beardsley (360) 905-2220
South Central (Yakima)	Gary Beeman (509) 575-2544	Janet Kinney (509) 575-2549

IX. List of Classes

Air Quality

Air Monitoring for Hazardous Materials

This course instructs participants in the practices and procedures for monitoring and sampling airborne hazardous materials. Topics include air monitoring and sampling programs, sampling techniques, and equipment.

Recommended Audience: Hazmat Staff, Environmental

Length: 5 days

ATMS Code: None at This Time

Instructors: EPA

Offered: As Needed

Asbestos Training for Management Planners

A course for management planners and other staff who determine appropriate asbestos response actions and develop schedules for implementing those actions.

Recommended Audience: Air Quality, Environmental, Facility Management Staff, Maintenance, Construction

Length: 2 days

ATMS Code: None at This Time

Instructors: NWCOHS
Offered: As Needed

ISTEA/Air Quality Planning Requirements

A summary of the legal requirements of ISTEA (Intermodel Surface Transportation Efficiency Act of 1991) as it relates to air quality planning. Examples are presented.

Recommended Audience: Planners, Engineers, Program

Development, Consultant, Consultant Liaison

Length: 2 hours

ATMS Code: None at This Time **Instructors:** Environmental Staff

Transportation Planning and Air Quality Conformity Requirements

An overview of the air quality conformity requirements as they relate to transportation planning. Examples are presented.

Recommended Audience: Planners, Engineers, Program

Development, Consultants

Length: 2 hours

ATMS Code: None at This Time **Instructors:** Environmental Staff

Offered: As Needed

General Environmental

4(F) Evaluation for Transportation Projects

4(f) is a method used to protect and evaluate property to assure the land is used appropriately. Appropriate and correct methods for writing a Section 4(f) evaluation. How to identify a Section 4(f) resource, when an impact occurs, and alternative analysis. How to identify Section 4(f) programs for parks and recreation areas, historic site, and historic bridges.

Recommended Audience: Environmental Document Preparers, Permit Reviewers, Consultants

Length: 8 hours
ATMS Code: B19
Instructors: FHWA
Offered: As Needed

Clean Water Act/404(B)(1) Requirements

Background on the National Environmental Policy Act and Clean Water Act. Explicit requirements of the wetland components of the Clean Water Act related to transportation projects.

Recommended Audience: Environmental document preparers, permit reviewers, consultants

Length:2 daysATMS Code:BH1Instructors:CorpsOffered:As Needed

Environmental Overview at WSDOT

An overview of environmental issues as they relate to transportation planning. Specific disciplines discussed include hazardous waste, water quality, cultural resources, air quality, environmental documentation, wetland mitigation, wetland monitoring, and erosion control.

Recommended Audience: Planners (Regional and OSC)

Length: 8 hours **ATMS Code:** BMT

Instructors: Environmental Staff

Offered: As Needed

Federal Wetland Regulation Policy

Use of lectures and class exercises to teach a basic understanding of what federal laws require, and how judicial decisions have affected them. How to use the legal exclusions and exemptions provided by wetland regulations. Explanation of the role of each federal agency pertaining to wetland regulations.

Recommended Audience: Regional and OSC Environmental, TransAid, Consultants

Length: 3 days
ATMS Code: BK8
Instructors: WTI

Offered: As Needed

NEPA/SEPA 404 Merger Agreement

This agreement merges the requirements of the National Environmental Policy Act (NEPA), the State Environmental Policy Act (SEPA), and Section 404 of the federal Clean Water Act. A short informational forum that discusses the changes brought about by the agreement and how it will affect project development. Topics include: how to implement the agreement for WSDOT projects, how to determine which projects will fall under the jurisdiction of the agreement, and how to coordinate agency comments.

Recommended Audience: Design, Construction, Maintenance, Project Engineers, Project Development, Bridge, Planning, Programming, Rail, Ferries, TransAid, Consultants, FHWA

Length: 4 hours **ATMS Code:** BLQ

Instructors: Environmental Staff

Offered: As Needed

Project Development and Environmental Documentation

Comprehensive overview of the project development and environmental documentation processes for federal aid transportation projects.

Recommended Audience: Environmental, Project Development, Design, Planning, TransAid, Consultants

Length: 3 days **ATMS Code:** A61 **Instructors:** NHI

Offered: Core Course once @ 2 years

Section 106 Review Process

Section 106 review is used to determine the historic significance of property. The course provides an overview of this federal regulation. The course will cover the basic steps in the review process, the history and philosophy behind the federal legislation that created Section 106, and the value of historic preservation.

Recommended Audience: WSDOT Staff, Hazardous Waste

Length: 1 hour

ATMS Code: None at This Time Instructors: UNR and NHI
Offered: As Needed

Hazardous Waste

8-Hour Refresher for Hazardous Material Emergency Response (OSHA)

This course fulfills the OSHA annual refresher training requirements for employees who have completed the 40-hour hazardous materials site safety training. Class provides OSHA mandated training and offers students the opportunity to

demonstrate their competencies in the areas of emergency response planning, recognition and classification of hazardous materials, personal protective clothing, respiratory protection, monitoring and detection, and team safety.

Recommended Audience: Construction, Environmental

Length: 8 hours

ATMS Code: None at This Time

Instructors: NWCOHS
Offered: As Needed

24-Hour Hazardous Material Emergency Response

This course is designed to satisfy 29 CFR 1910.120(p) initial training requirements for employees who work on hazardous waste sites for limited exposure tasks and for those who work on sites, but who do not handle the hazardous materials (for example, administrative duties and paperwork). This class will present relevant regulations, effects of exposure, general site hazards, biohazards, and information about confined spaces.

Recommended Audience: Environmental, Construction, Maintenance

Length: 24 hours

ATMS Code: None at This Time

Instructors: NWCOHS
Offered: As Needed

40-Hour Hazardous Materials Site Safety

For employees working in any capacity on sites that have hazardous wastes or is suspected of having hazardous wastes. Students get hands on exercise and situations. Information about the classification of hazardous materials, detection, and monitoring, the use of protective equipment, and the implementation of safety practices. This class is an OSHA mandated course according to 29 CFR 1910.120 (q) (6).

Recommended Audience: Construction, Environmental,

Maintenance

Length: 5 days

ATMS Code: None at This Time

Instructors: EHS

Asbestos Regulations and Abatement Contracting

An overview of asbestos regulations as legally required for abatement contracting. Examples are given. Questions and answers are welcome.

Recommended Audience: Field Inspect, Regional Staff,

Contractors

Length: 4 hours

ATMS Code: None at This Time **Instructors:** Environmental Staff

Offered: As Needed

Bridge Painting Procedures for Environmental Protection

Overview of the Best Management Practices used for bridge painting projects and guidelines for specifying containment systems for specific situations.

Recommended Audience: WSDOT Staff, Environmental,

Design, Maintenance

Length: 4 hours

ATMS Code: None at This Time **Instructors:** Construction Inspection

Offered: Pending

Conducting an Initial Site Assessment

This course is being offered to regional environmental staff and others interested in learning how to conduct a proper Initial Site Assessment (Phase I Site Assessment) to assess property contamination potential. The course will cover the basics of site assessment, including where to find information to comply with ASTM standards. Information necessary to prepare a legally sufficient report will also be provided.

Recommended Audience: WSDOT Staff, Real Estate,

Environmental

Length: 1-4 hours

ATMS Code: None at This Time **Instructors:** Environmental Staff

Dangerous Waste Management Training (DWMT)

Many WSDOT facilities generate regulated quantities of dangerous wastes as part of normal business activities. The Washington State Department of Ecology (WSDOE) requires facilities that generate more than 2,200 lbs. of dangerous waste annually to develop an employee training program for the purpose of teaching facility staff dangerous waste management procedures relevant to the positions in which they are employed.

Recommended Audience: Stores Staff, Mats Lab Staff,

TEF Mechanics

Length: 8 hours

ATMS Code: None at This Time

Instructors: FOSSC
Offered: As Needed

General Hazard Awareness Training

How to avoid common hazardous materials during routine site development. This class demonstrates the need for site workers to be aware of potential hazards. A list of common hazards is presented and examples of how and where they are likely to be located.

Recommended Audience: Environmental, Construction, Design, Maintenance, Consultant, Consultant Liaison

Length: 1-8 hours

ATMS Code: None at This Time **Instructors:** Environmental Staff

Offered: As Needed

Hazardous Materials Assessments in Project Planning

Discussion on the importance of Hazardous Material Assessments. Illustrations, flowcharts, and case studies are used to indicate the relationship between hazardous materials assessment and the project planning process.

Recommended Audience: WSDOT Staff, Design,

Environmental

Length: 1-4 hours

ATMS Code: None at This Time **Instructors:** Environmental Staff

Hazardous Materials Management Plan Implementation (HMMP)

Many WSDOT Mats Labs store large quantities of hazardous materials as part of normal business activities. Some local Fire Marshal authorities have required these facilities to develop Hazardous Material Management Plans (HMMPs). Facilities that develop HMMPs must also develop a training program to facilitate the implementation of HMMPs.

Recommended Audience: Mats Lab Staff, Environmental

Length: 8 hours

ATMS Code: None at This Time

Instructors: FOSSC
Offered: As Needed

Hazardous Materials Transportation Training (Trans)

For all persons involved with the transportation of hazardous materials/dangerous wastes. Generally referred to as HM 181, the new regulations stipulate that any person involved with the transportation of hazardous materials (i.e., persons who prepare waste for shipment, sign manifests or accept delivery of hazardous materials) must, at a minimum, be trained in their specified field as it pertains to hazardous materials transportation.

Recommended Audience: Stores Staff, Mats Lab Staff, TEF Mechanics

Length: 8 hours

ATMS Code: None at This Time

Instructors: FOSSC
Offered: As Needed

Hazardous Waste Training for Real Estate Staff

How to recognize sites with potential hazardous materials. Overview of the types of background checks that can be used to determine past hazardous waste presence on sites. Discussion of specific indicators that suggest the potential presence of hazardous waste.

Recommended Audience: Real Estate

Length: 4 hours

ATMS Code: None at This Time **Instructors:** Environmental Staff

Herbicide Fill Bay Spill Response Plan Training

WSDOT herbicide fill bays are regulated, in part, by the Washington State Department of Agriculture (WSDA). Permanent herbicide mixing/loading facilities must have a spill response plan for use in the event of an emergency. One facet of the plan includes a provision that facility users are trained on how to implement the spill response plan.

Recommended Audience: Maintenance Staff, Environmental, Landscape

Length: 8 hours

ATMS Code: None at This Time

Instructors: FOSSC
Offered: As Needed

How to Interpret a Preliminary Site Investigation Report

Evaluating a Preliminary Site Investigation. Focus on what constitutes a complete PSI, including sampling and analytical techniques commonly used.

Recommended Audience: WSDOT Staff, Real Estate, Design,

Environmental

Length: 1-4 hours

ATMS Code: None at This Time **Instructors:** Environmental Staff

Offered: As Needed

How to Prepare and Evaluate an EIS Discipline Study for Hazardous Materials

This class is a step-by-step guide to preparing and evaluating a proper Hazardous Materials Discipline Study. The student will learn about each component of these studies. Includes how to find and identify information resources that are the foundation of the study. In addition, what key items need review in the evaluation of the study.

Recommended Audience: WSDOT Staff, Consultants, Design

Length: 1-4 hours

ATMS Code: None at This Time **Instructors:** Environmental Staff

Site Investigations and Property Acquisition

This course is being offered to individuals interested in learning more about the interrelations between hazardous materials investigations and property acquisition. The course will focus on the process used by WSDOT to investigate property for potential contamination. Included will be a discussion of right-of-entry issues and procedures.

Recommended Audience: WSDOT Staff, Real Estate,

Environmental

Length: 1-4 hours

ATMS Code: None at This Time **Instructors:** Environmental Staff

Offered: As Needed

Spill Prevention, Control and Countermeasure Plan Implementation Training (SPCC)

Some WSDOT facilities have been required to develop site specific plans pertinent to managing hazardous materials or dangerous waste emergency incidents. Staff at these designated facilities will be trained on effective implementation of the SPCC plans.

Recommended Audience: Mats Lab Staff, Maintenance Staff, Equipment Mechanics, Contractors, Construction

Length: 8 hours

ATMS Code: None at This Time

Instructors: FOSSC **Offered:** As Needed

Spill Prevention During Construction

Hazardous waste issues relating to construction, including protecting personnel and property, reporting and cleanup requirements, and preparing requests for EPA Identification and Annual Reports.

Recommended Audience: WSDOT Staff, Construction,

Maintenance, Environmental

Length: 4 hours **ATMS Code:** BQG

Instructors: Environmental Staff

Wastewater Treatment Systems Use and Maintenance Training (WTST)

Implementation of "Oil/Water Separator Operations and Maintenance Guidelines"; How to minimize adverse impacts to WSDOT drain systems: How to maintain oil/water separators; Waste disposal procedures.

Recommended Audience: Maintenance Staff, TEF Mechanics, Mats Lab Staff

Length: 8 hours

ATMS Code: None at This Time

Instructors: FOSSC
Offered: As Needed

WSDOT General Management Training for TEF Mechanics

How to minimize environmental impacts through proper management of problem and dangerous wastes. How to incorporate spill prevention, control and cleanup techniques into normal maintenance activities.

Recommended Audience: Environmental, Construction, Maintenance, Contractors

Length: 8 hours

ATMS Code: None at This Time

Instructors: FOSSC
Offered: As Needed

Hydraulics

Hydraulics and Highway Drainage

Course covers hydrology methods, culvert designing, roadway drainage principles, water quality BMP design issues, and various aspects of stormwater management at WSDOT.

Recommended Audience: Design Staff, Environmental,

Hydraulics, Landscape, TE1-TE3

Length: 2-3 days **ATMS Code:** AGH **Instructors:** Hydraulics

Offered: Core training offered annually

River Mechanics

Course covers the forces and motions that work within river systems and how to manage these forces through engineering techniques (bioengineering included) to minimize adverse effects to nearby WSDOT facilities.

Recommended Audience: Design Staff, Landscape, TE2-TE4

Length: 3 days **ATMS Code:** BHM

Instructors: Geomax (Dr. Donald Reichmuth)

Offered: As Needed

River Mechanics for Engineers (Abbreviated Version)

Course covers the forces and motions that work within river systems and how to manage these forces through engineering techniques (bioengineering included) to minimize adverse effects to nearby WSDOT facilities.

Recommended Audience: Design Staff, Environmental, Landscape, Maintenance, TE2-TE4

Length: 8 hours

ATMS Code: None at This Time

Instructors: Hydraulics **Offered:** As Needed

Waterworks Hydrology Computer Program

Course covers how to use waterworks (Hydrograph Computer Program) to determine adequate size and other design aspects of stormwater management facilities such as retention and detention ponds.

Recommended Audience: Design Staff, Hydraulics, TE1-TE3

Length: 8 hours

ATMS Code: None at This Time

Instructors: Hydraulics **Offered:** As Needed

Noise

Advanced Highway Noise Analysis

Training on PCs in STAMINA (noise modeling computer software) and other noise measurement procedures

Recommended Audience: Regional and OSC Environmental,

Consultants, TransAid

Length: $3^{1}/_{2}$ days **ATMS Code:** A41

Instructors: Louis Cohn (consultant)

Offered: As Needed

Fundamentals and Abatement of Highway Noise

Basic class about regulations, traffic noise model and noise analysis, noise measurement, mitigation and documentation. Group work and problem solving.

Recommended Audience: Regional and OSC Environmental,

Consultants TransAid

Length: 3½ days
ATMS Code: AUO
Instructors: NHI

Offered: As Needed

Water Quality

Construction Site Erosion and Sediment Control Certification

An overview for inspectors and contractors involved with erosion and sediment control on and adjacent to construction sites.

Recommended Audience: Tech 3, Trans. Engineers 1&2, Environmental, Consultants, Design, Construction, Project Inspectors

Length: 2 days **ATMS Code:** BPW

Instructors: Environmental Staff

Offered: Core Course

Fundamentals of Urban Surface Water Management

This course focuses on the effects of urban development on the movement of water and the materials it transports through watersheds, and the analysis of how these effects modify the environment in wetlands, lakes, streams, and rivers receiving runoff from urban areas.

Recommended Audience: Water Quality, Environmental, Design, Maintenance, Construction

Length: 2 days

ATMS Code: None at This Time

Instructors: PEPL
Offered: As Needed

Storm and Surface Water Monitoring

This course introduces the specific techniques for monitoring the physical, chemical and biological components of freshwater aquatic environments and the most commonly used techniques in these settings.

Recommended Audience: Water Quality, Environmental,

Maintenance, Design

Length: 2 days

ATMS Code: None at This Time

Instructors: PEPL

Offered: As Needed

Wetlands

Bioengineering

Workshop for engineers and others involved in design and construction of shoreline protection and slope stabilization projects. Presents standard drawings and specifications for soil bioengineering projects, how to use them and examples of projects completed by others.

Recommended Audience: Design, Construction, Maintenance,

Landscape

Length: 8 hours **ATMS Code:** BQM

Instructors: Ecology and Consultants

Offered: As Needed

Developing Wetland Mitigation Sites

This class will discuss how to build wetland mitigation sites. Topics include how to work with response agencies and how to assure a successful site.

Recommended Audience: Biologists, Environmental,

Designers, Landscape, Architects

Length: 1 day

ATMS Code: None at This Time **Instructors:** Environmental Staff

Offered: As Needed

Endangered Species Act: How Does It Affect WSDOT

A short talk on the overview of the Endangered Species Act and how those regulations apply to WSDOT projects.

Recommended Audience: Any interested party as appropriate

Length: 1 hour

ATMS Code: None at This Time **Instructors:** Environmental Staff

Offered: As Needed

Wetland Delineation (Basic Classroom Instruction)

A basic course on the application of the wetland delineation procedure (1987 manual) in use by the Army Corps of Engineers. Lecture and field exercises.

Recommended Audience: Wetland Staff, Biologists,

Environmental, Landscape

Length: 5 days

ATMS Code: None at This Time

Instructors: WTI
Offered: As Needed

Wetland Delineation (Field Techniques)

A combination lecture and field course which concentrates on methods typically used in wetland delineation. Topics include map and compass reading, locating positions, estimating slopes, and sampling all strata of vegetation and soils.

Recommended Audience: Wetland Staff, Biologists,

Environmental

Length: 3 days
ATMS Code: None
Instructors: WTI
Offered: As Needed

Wetland Delineation and Practicum (Combined Classroom and Field Techniques)

Class combines the basic delineation course with a two-day field practicum. A class for those with little or no training/experience in wetland delineation who needs to apply the procedures with the opportunity to work with experienced delineators.

Recommended Audience: Environmental

Length: 7 days

ATMS Code: None at This Time

Instructors: WTI

Offered: As Needed

Wetland Mitigation Monitoring

A seminar/discussion with the goal of sharing with designers monitoring data on an individual region's mitigation sites in order to improve mitigation design concepts.

Recommended Audience: Biologists, Environmental,

Designers, Landscape, Architect

Length: 1 day

ATMS Code: None at This Time

Instructors: OSC Wetland Monitoring Staff

Offered: Core Course Annual

Wetlands Recognition, Regulation and Resource Value (Wetlands 101)

Discussion of the value of wetlands as a resource, their regulation by local, state, and federal resource agencies and their identification. Discussion of mitigation and wetland policy and WSDOT project development.

Recommended Audience: Design, Construction, Maintenance,

Real Estate

Length: 8 hours **ATMS Code:** BKS

Instructors: Environmental Staff
Offered: Core Course Annual

Wetlands, Wildlife, and WSDOT Maintenance

A brief overview of the relationships between wetlands and wildlife and the effect they have on routine WSDOT activities.

Recommended Audience: Maintenance Engineer 2

Length: $1^{1/2}$ hours

ATMS Code: None at This Time **Instructors:** Environmental Staff

Offered: Core Course

What Is A Wetland?

Videos and slides are used to inform non-biologists about the characteristics and values of wetlands.

Recommended Audience: Any interested WSDOT staff

Length: 1-4 hours **ATMS Code:** None

Instructors: Environmental Staff

X. Instructor Abbreviations

Corps — U.S. Army Corps of Engineers

EHS — Environmental Health Services (Bellevue)

EPA — Environmental Protection Agency

FHWA — Federal Highway Administration

FOSSC — WSDOT Field Operations Support

Service Center

NHI — National Highway Institute

NWCOHS — NW Center for Occupational Health and

Safety (UW)

OSC — Olympia Service Center

PEPL — Professional Engineering Practice Liaison

Program (University of Washington)

UNR — University of Nevada — Reno

Division of Continuing Education

UW — University of Washington

WETRC — Washington Environmental Training Center

WSDOT — Washington State Department of Transportation

WTI — Wetland Training Institute

3:P:ENV2